

**Please read the following instructions carefully.**

Science is mostly about understanding what causes things to happen. Often, this understanding is built through analogical reasoning. In this survey, you will be asked to build analogies based on causal similarities.

The following examples are designed to help you see the difference between causal and non-causal analogies.

*An example of a causal analogy is:*

Getting in an auto accident is similar to tripping on a step because they both can be caused by not paying attention.

*An example of a non-causal analogy is:*

Getting in an auto accident is similar to tripping on a step because they both can result in getting hurt.

The first example is causal because it relates an underlying and common reason for two distinct events. This second example is non-causal because the similarity is a common outcome of two distinct events.

**PLEASE TURN TO THE BACK SIDE OF THIS PAGE.**

**Please provide causal analogies for the following phenomenon to the best of your ability.**

1. A balloon floating in air is like:

they are similar because:

2. CO<sub>2</sub> degassing from the oceans is like:

they are similar because:

**PLEASE COMPLETE THE DEMOGRAPHIC QUESTIONS ON THE NEXT PAGE.**

## GEOSCIENCE EXPERIENCE QUESTIONNAIRE - GENERAL

This survey is intended to evaluate your education, training, and current employment in the geosciences. Please respond to all items that apply as of the current date.

## UNDERGRADUATE EXPERIENCES

1. Did you take, or are you taking, any of the following courses?
  - a. *Physical Geology and/or Historical Geology* ☐ NO ☐ YES
  - b. *Mineralogy and/or Petrology* ☐ NO ☐ YES
  - c. *Sedimentology and/or Stratigraphy* ☐ NO ☐ YES
  - d. *Structural Geology* ☐ NO ☐ YES
  - e. *A Field Course or Camp in geoscience or a related field* ☐ NO ☐ YES
2. Have you completed, or are you currently working on,:
  - a. An assistantship or internship in *geoscience or a related field* ☐ NO ☐ YES
  - b. Any original research in *geoscience or a related field*, including in a course ☐ NO ☐ YES
  - c. An undergraduate thesis in *geoscience or a related field* ☐ NO ☐ YES

## GRADUATE EXPERIENCES

3. Are you currently pursuing an M.A./M.S. in *geoscience or a related field*? ☐ NO ☐ YES
4. Do you hold an M.A./M.S. in *geoscience or a related field*? ☐ NO ☐ YES
5. Are you currently pursuing a Ph.D. in *geoscience or a related field*? ☐ NO ☐ YES
6. Do you hold a Ph.D. in *geoscience or a related field*? ☐ NO ☐ YES

## PROFESSIONAL EXPERIENCES

7. Do you work, or have you ever worked professionally, in *geoscience or a related field*? ☐ NO ☐ YES
  - a. For how many years? Do not include years in which you were engaged primarily in undergraduate and graduate education.
 

☐ less than 5 years    ☐ 5-10 years    ☐ more than 10 years

Please add any additional information that you think may be important for determining your experience in the geosciences.

Your GENDER: ☐ Male    ☐ Female    ☐ Transgender

Your AGE: \_\_\_\_\_

Your Ethnicity: CHOOSE ALL THAT APPLY

- ☐ African American/Black  
☐ Caucasian  
☐ Latino/Hispanic  
☐ Native Hawaiian/Pacific Islander  
☐ Native American  
☐ Other \_\_\_\_\_